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INTERREGIONAL CONFERENCE ON HEALTH PROBLEMS
IN THE RUMANIAN CHEMICAL INDUSTRY

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Following is the translation of an article by C. Raucher in
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89-91.

From 28 to 30 September 1960, the Interregional Conference on Medical-Health Problems in the Chemical Industry was held at Cluj.

Over 150 invitees from all over the country participated, including delegates of the Institute of Hygiene of the Rumanian People's Republic and affiliates in Timisoara and Jassy, from the university Departments of Workers' Hygiene and Professional Diseases at Bucharest, Jassy, and Cimisoara, from the Research Institute of Labor Protection of the CCS [?], from regional clinics and rayon clinics, as well as doctors in private practice. In addition, a large delegation participated from the Ministry of the Petroleum and Chemical Industry, as did numerous factory directors, chief engineers, and labor-protection engineers.

The purpose of the conference was to establish, through a broad exchange of experience, the present stage of medical-health problems raised by the chemical industry in its state of full and rapid development.

The conference was opened by Professor G. Cadariu, President of the Hygiene Section of the Society of Medical Sciences, who pointed out the dizzying development of the chemical industry in our country and its magnificent prospects, as foreseen by the Resolutions of the Third Congress of the PMR (Partidul Muncitoresc Roman -- Rumanian Workers' Party). He also pointed out that from the medical point of view, the emphasis must be placed on the work of preventing sickness, in compliance with the provisions of the Resolutions of the Third Congress of the PMR.

In their welcoming addresses the representatives of local organs of the PMR, of the Society of Medical Sciences, of the Regional People's Council, and of some scientific institutions stressed the proper orientation of public health workers, to be made concrete through the thematics of the conference, as well as the duties of varying importance falling to the sector of workers' hygiene in this sphere.

At the conference 13 survey and 39 original scientific papers were presented, comprising experimental, soil, and clinical investigations.

The survey papers demonstrated the present stage and future tasks of workers' hygiene, as bound up with the chemical industry development (Dr B. Barhad); problems of orientation of scientific research and practical work in important branches of the chemical industry, such as the plastics

industry (Dr S. Gabor); nitroamino derivatives (Dr B. Barhad and co-workers). They further discussed such special problems as professional dermatoses (Academician S. G. Nicolau), allergic pathology (Dr G. Mihaila), professional and metaprofessional morbidity (Professor G. Dinischiotu), professional cancer (Prof P. Manu), female and adolescent labor (Prof L. Prodan), and organization of medical aid (Prof I. Prodan and co-workers). Other subjects were: the problems of preventing, with the help of masks, accidents and poisoning (Engineer Miclescu and co-workers), problems of communal hygiene as increased by the chemical-industry development (Prof I. Ardeleanu), and workers' nutrition in the chemical industry (Prof V. Galea).

As the works presented show, the investigations covered the essential medical-health problems of the chemical industry.

The first group of works was concerned with investigating the industrial environment of factories and pilot stations, thus contributing to the knowledge of concentration of harmful substances, the method of concentration of harmful substances, the method of determination, and the degree of harmfulness. Problems of workers' hygiene were presented for the chemical industry in the capital (Dr D. Gheorghiu and co-workers, Clinic of the Capital), in pilot stations of the Stalin Region (Dr G. Risca, Dr I. Braun, Stalin Regional Clinic), in an antibiotics factory (Dr G. Mihaila and co-workers), and of a rayon in the capital (Dr M. Dragnea and co-workers). Works were also presented concerning the concentration of some toxic substances in the atmosphere of industrial locations, in the manufacture of vinyl polychloride and organic glass (Dr C. Raucher and co-workers), in the DDT industry (Dr S. Gabor and co-workers), and exposure to fluorine in a superphosphate factory (C. Popovici).

Chemical health problems in the chemical industry (Chemist S. Iliescu), problems of electrical transforming in the chemical industry (Engineer Z. Ionescu), and a new method for determining the amount of mercury in biological materials (Dr B. Nestorescu) brought this group of communications to a close.

The experimental works were primarily concerned with the toxicity of some new substances of unknown or poorly-known toxicity, with respect to establishing safe permissible limits. Docent H. Straus and Dr T. Frits presented experimental contributions concerning the toxicity of SO_2 , using original methods of pneumoplethysmography. Dr S. Palade and co-workers presented the action of nitrobenzene upon the sino-carotid reflex and investigations concerning the toxicity of a dinitrophenol derivative.

Problems of insectofungicides were treated by the works of Dr S. Gabor and Dr M. London.

Plastics held the attention of several researchers; the toxicity of monomers is generally poorly-known in the literature, while owing to the technology employed in this country, there exist intermediate products that are still unknown. Works concerning the toxicity of metacrylate of methyl (Dr T. Niculescu), of some intermediate products in the manufacture of relon (Dr S. Herzog), and of certain substances employed in the manufacture of organic glass (Dr S. Gabor) and in the manufacture of epoxy-resins (Dr S. Herzog) contributed to the establishment of permissible limits or the correction of existing ones. We must also record here the enzymatic researches

into certain experimental poisonings of Dr J. Goldstein and co-workers, and the influence of some mean factors upon the toxicity of certain substances (Dr V. Pislaru and co-workers).

The third group of works treated various problems from a clinical point of view, or were observations upon workers at work in the field of labor. Professor Dinischiotu and co-workers show in a lengthy work the irritant effects of gases in a chemical industry, a problem little-treated up until now, since it does not always affect working capacity, but which nevertheless presents a special clinical and hygienic interest. The clinical and radiological aspects of acute professional gas poisoning (Dr A. Georgescu and co-workers), likewise from the clinic directed by Prof Dinischiotu, round off other aspects of the problem.

Professor L. Prodan and co-workers, Dr L. Pilat and co-workers, and Dr I. Suciuc have in their work treated the problem of early diagnosis and clinical treatment of acute and chronic mercury poisoning.

One interesting problem consisted of the description of a professional syndrome among solderers using lead in the sulphuric acid industry; it was communicated by Professor Dinischiotu and co-workers.

Dr I. Suciuc and co-workers reported on cases of poisoning with methyl chloride in a refrigerator repair shop; Dr N. Muica, on aspects of acute hydrogen arseniate poisoning.

The problem of methemoglobinizing toxicoses, especially the nitroamino derivatives, was treated from the clinical point of view in the work of Dr Liliș and co-workers, and Dr S. Gabor and co-workers (with observations concerning enzymatic modifications), and Dr C. Raucher (concerning nervous modifications among workers in a synthetic dye factory), made contributions toward early diagnosis.

The development of the chemical industry also raises many problems both on the part of other branches of hygiene and in certain clinical specializations, as demonstrated by the survey papers mentioned above and the work of Docent H. Straus concerning pollution of the communal air in industrial centers of Transylvania.

The prevention of accidents and poisonings with the aid of filtering and insulating masks was treated by Engineer O. Miculescu and Dr H. Davidson; the combating of static electricity in the plastic and rubber industry, where a constant fire hazard from this source exists, was presented by Engineer L. Macoveanu of the same institute.

The final group of works was concerned with problems of general and professional morbidity in six large chemical enterprises and combines in Transylvania (Dr M. Balkanyi, G. Nadufvary, and co-workers), in the chemical industry sector in the capital (Dr T. Dobrescu), as well as the workers' state of health and working conditions in an artificial silk factory (Dr D. Gheorghiu and co-workers) and the study of dispensary treatment of workers working with benzine (Dr G. Caluschi, Ploesti Regional Clinic).

43 participants took part in the discussions.

The speakers brought out the fact that the original works and survey articles reached the most current medical-health problems of the chemical industry. The practical and pressing importance of scientific and experimental

research concerned with establishing permissible limits was stressed. The necessity was likewise pointed up of collaboration among doctors, engineers, and chemists-toxicologists to resolve the complex problems currently posed in the chemical industry.

At the conference a resolution was adopted containing the principal measures designed to bring agreement between the current needs of the chemical industry and curative-prophylactic medical assistance in the enterprises, preventive work, and scientific research.

The resolutions foresee the creation of a consultative commission between the Ministry of Health and Social Welfare, and the Ministry of the Petroleum and Chemical Industry; the revision of some norms concerning the permissible limit of toxic substances in the atmosphere of places of work and the revision of normalization directives of the medical-health cadres in the chemical sector, as well as of health legislation in connection with initial-employment and periodical medical examinations.

In addition, measures are provided for the instruction of doctors in private practice and of doctors and toxicologists in clinics and in toxicological laboratories in factories. [Measures are provided for] the modernization of techniques for determining the proportion of toxic substances in the atmosphere and of methods of investigation at the level of dispensaries and SMS [Societatile Medico-Sanitare--Medical Health Societies?] development and equipping of workers' health departments in public-health institutes at the level of present-day techniques and at the level necessary for meeting requirements.

The participants of the conference believe that productive activity in safeguarding the workers' health will be assured by a stricter collaboration between directors of industrial enterprises, trade-union organs of labor protection, institutes of scientific research, and doctors in private practice and clinics.